

**LINTON RURAL DISTRICT**

IN THE

**Administrative County of Cambridge.**

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**FIFTY-SECOND**

**ANNUAL REPORT**

OF THE

**MEDICAL OFFICER OF HEALTH**

FOR

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**1925**

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## Fifty-second Annual Report of the Medical Officer of Health for the Linton Rural District, in the Administrative County of Cambridge, for the Year 1925.

**THIS REPORT** is prepared in accordance with the Circular of the Ministry of Health as to the contents and arrangement of the Annual Reports of Medical Officers of Health for 1925.

The District lies in the Eastern area of the County of Cambridge, and extends over 48,115 acres. The northern portion of it is situated on high ground which is an outcrop of the chalk with occasional patches of glacial boulder clay, this is bounded on the south by a stream, the Bourne or Lin, which rises in the District and flows into the Cam. The southern area is flat and through this the river Cam flows.

It is agricultural in character and most of it is arable land. There is a Royal Air Force Station at Duxford. There are Paper Mills, two Leather Works, a Glove Factory, two Aerated Water Factories, and a Printing Works, at Sawston; a Chemical Factory at Duxford; a Brewery at Pampisford; an Ironfoundry at Whittlesford, and a certain amount of "home-work" in textile goods is carried on.

The report of the Registrar-General of the census of 1921 gives the figures of the principal occupations of the inhabitants: Agricultural workers 1,729, metal workers 120, workers in skins and leather goods 93, makers of textile goods and articles of dress 155, paper workers, printers, etc. 161, builders, bricklayers, etc. 182, personal service males 107, females 446.

The census returns are a guide to the conditions of the district; the population in 1881 was 12,427, in 1891 it was 12,120, in 1901 it was 10,729, in 1911 it was 10,567, and in 1921 it was 9,926. If these figures are considered with the figures of the yearly natural increase, some idea is obtained of the numbers of healthy country stock that go to strengthen the towns.

*Natural Increase*—Births over deaths: 1912, 90; 1913, 23; 1914, 46; 1915, 15; 1916, 5; 1917, -7; 1918, 11; 1919, 24; 1920, 95; 1921, 48; 1922, 21; 1923, 30; 1924, 37; 1925, 77.

The figures for the child population reveal an interesting but somewhat disturbing fact; in 1881 there were 5,096 children under 15, in 1891 there were 4,766, but in 1921 they only numbered 2,433.

## GENERAL STATISTICS.

Area (acres) : Land, 48,036 ; Inland water, 79.—Total 48,115.

Population (1924) : For Birth rate, 10,000 ; for Death rate, 9,480.

Number of inhabited houses : (1921) 2,581.

Number of families or separate occupiers (1921) : 2,602.

Rateable Value : £78,516 (1924).

Sum represented by a penny rate : £303 (1924).

## EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

BIRTHS : Legitimate 163 (85 males, 104 females), Illegitimate 9 (4 males, 5 females). Total 189. Birth rate 18.9.

DEATHS : 121 (60 males, 61 females). Death rate 12.7.

Number of women dying in, or in consequence of, childbirth : from sepsis, 0 ; from other causes, 0.

DEATHS of Infants under one year of age : Legitimate, 4 ; Illegitimate, 1. Total, 5. Infantile Mortality, 25.4.

DEATHS : from Measles (all ages), 1 ; Whooping Cough (all ages), 0 ; Diarrhœa (under two years of age) 0.

BIRTHS			1922	1923	1924	1925
Males	..	..	98	87	76	85
Females	..	..	77	85	87	104
			—	—	—	—
Total			175	172	163	189
Birth Rate			17.7	17.5	16.6	18.9
DEATHS						
Males	..	..	72	66	52	60
Females	..	..	68	69	62	61
			—	—	—	—
Total			140	135	114	121
Death Rate			14.1	14.1	11.9	12.7
Infantile Mortality			34.3	63.9	36.8	25.4

# Notifiable Infectious Diseases during 1925.

DISEASE.	Cases notified.	AGE—PERIODS.											Removed to Hospital to Cambridge.	Total Deaths
		—1	1—	2—	3—	4—	5—	10—	15—	20—	35—	45—	65—	
Small-Pox .. ..	—												—	—
Diphtheria .. ..	—												—	—
Scarlet Fever .. ..	9	—	—	1	—	1	5	2	—	—	—	—	1	—
Ophthalmia Neonatorum ..	1	1											—	—
Pneumonia .. ..	—												—	—
Erysipelas .. ..	2											2	—	—
Encephalitis Lethargica ..	1									1			—	1
Totals .. ..	13	1	—	1	—	1	5	2	—	1	—	2	1	1



# Notifiable Infectious Diseases.

	1921	1922	1923	1924	1925	Total Cases notified.	Admitted to Hospital, Cambridge.	Total Deaths.
Small-pox .. .. .	—	—	—	—	—	—	—	—
Enteric Fever .. .. .	—	—	—	—	—	—	—	—
Diphtheria .. .. .	5	13	3	—	—	21	15	—
Scarlet Fever .. .. .	15	15	4	6	9	49	19	1
Puerperal Fever .. .. .	—	2	—	2	—	4	—	—
Erysipelas .. .. .	6	3	3	—	2	14	—	1
Dysentery .. .. .	—	—	—	1	—	1	—	—
*Malaria .. .. .	—	3	—	—	—	3	—	—
Acute Poliomyelitis .. .. .	—	—	—	1	—	1	1	—
†Ophthalmia Neonatorum .. .. .	1	1	—	—	1	3	1	—
Encephalitis Lethargica .. .. .	—	—	—	—	1	1	—	1

\*Infection contracted abroad;

†One case treated in Hospital, vision unimpaired;

## INFECTIOUS DISEASES.

No cases of Diphtheria were notified during the year.

There were nine notifications of Scarlet Fever during the year. Three cases occurred at Abington, five at Hildersham, and one at Linton. Seven cases occurred in January, one in February, and one in November. One patient was admitted to Hospital.

One death from Encephalitis Lethargica occurred at Duxford.

No cases of Puerperal Fever were notified.

One case of Ophthalmia Neonatorum was notified.

Two cases of Erysipelas were notified.

There were eighteen "new" cases of Tuberculosis notified; of these thirteen were males and five females; fourteen were respiratory and four non-respiratory cases.

There were six deaths of patients suffering from Pulmonary Tuberculosis, one of these died from Tubercular Meningitis.

In an accompanying table will be seen the cases of Infectious Disease notified since 1920.

Since 1923 an increasing amount of attention has been paid to the non-notifiable Infectious Diseases.

In 1925 the chief outbreaks have been Measles at Pampisford, where the school was closed from 5th to 29th of May, at Whittlesford, at Sawston where there was one death of an adult, and at Balsham.

Chicken-pox occurred at Bartlow, Horseheath, Linton, West Wrating, Balsham, and Duxford.

Mumps occurred at Hinxton, Sawston, and Pampisford.

In 1923 and 1924 there were Measles at Hinxton, Ickleton, and Whittlesford; Chicken-pox at Pampisford and Whittlesford; Whooping Cough at Weston Colville and at Linton where there was one death of an infant.

The distribution of the cases during the months of the year has been :  
Jan. Feb. Mar. April May June July Aug. Sept. Oct. Nov. Dec.

Diphtheria

1	—	2	1	—	—	3	5	3	5	—	1
---	---	---	---	---	---	---	---	---	---	---	---

Scarlet Fever

18	4	2	—	—	1	—	—	4	—	2	16
----	---	---	---	---	---	---	---	---	---	---	----

Patients suffering from notifiable Infectious Diseases are notified by the medical practitioners, they are visited, and if special nursing is required or if adequate isolation cannot be carried out in their homes, they are removed to hospital in the hospital ambulance. Where patients are nursed in their own homes and there are other children in the family, constant visits to the home are made and the children examined. Under this method there does not seem to be an appreciably greater number of contact cases than occur where the patient is removed to hospital.

With regard to the non-notifiable Infectious Diseases, school teachers report the cases. In many instances the children are visited, if necessary the parents are advised to call in their medical practitioner; the diagnosis is verified, directions are given as to isolation and precautions to be taken to prevent the spread of infection, contacts are examined. If the severity of the illness needs it, the patients can be removed to hospital. The children are excluded from school in accordance with the Regulations of the Education Authority or for as long as their health requires it.

Particular attention is paid to Measles and Chicken-pox, in certain instances the patients are observed throughout the epidemic. In the case of Chicken-pox, a diagnosis of the case or cases at the commencement of an outbreak is usually made, and in many instances the possibility of an intercurrent infection of the severer disease is not lost sight of.

In a report prepared for the Chief Medical Officer of the Ministry of Health on Scarlet Fever, it was found that there had been major epidemics in 1881 and 1882, 1898 and 1899, that is roughly an interval of twenty years; minor epidemic waves occurred in 1885 and 1887, 1912 and 1919.

The figures of the Case Mortality—*i.e.* the number of deaths per 100 cases—lend confirmation to the clinical view that the disease has lessened in severity. In the years 1874-84 there were 313 cases and 31 deaths, with a case mortality of 9.9; from 1885-94 there were 234 cases and six deaths, a case mortality of 2.6; from 1895-1904 there were 214 cases and five deaths, a case mortality of 2.3; from 1905-14 there were 166 cases and two deaths, case mortality 1.3; from 1915-1923 there were 133 cases with two deaths, a case mortality of 1.5.

On comparing the Scarlet Fever Death Rate—*i.e.* the number of deaths from Scarlet Fever per 1,000 of the population with the General Death Rate, it was found that the improvement in the mortality from Scarlet Fever was not merely in accordance with the improvement in the General Death Rate.



In the years 1874-84 the Scarlet Fever death rate was .22, from 1885-94 it was .044, from 1895-1904 it was .045, from 1905-1914 it was .019 and from 1915-1923 it was .022. It therefore shows a most substantial improvement from .22 to .022.

The General Death Rate in the years 1874-80 was 16.2, from 1881-90 it was 16.3, from 1891-1900 it was 15.2, from 1901-1910 it was 14.4 and from 1912-21 it was 14.6.

If the highest death rates are expressed as 100, that for Scarlet Fever being .22 in the years 1874-84, and the General Death Rate 16.3 in 1881-90 it is seen that the Scarlet Fever death rate has improved from 100 to 10, while the General Death Rate has improved from 99.3 to 89.

Deaths are much less frequent in recent years than they used to be; from 1881-1900, deaths occurred in ten of the years, but from 1901-1920 deaths only occurred in three of the years (see Graph I.)

It is therefore seen that in Scarlet Fever there has been a great improvement in the case mortality, which combined with the substantial improvement in the death rate tends to confirm the clinical view that the disease has lessened in severity.

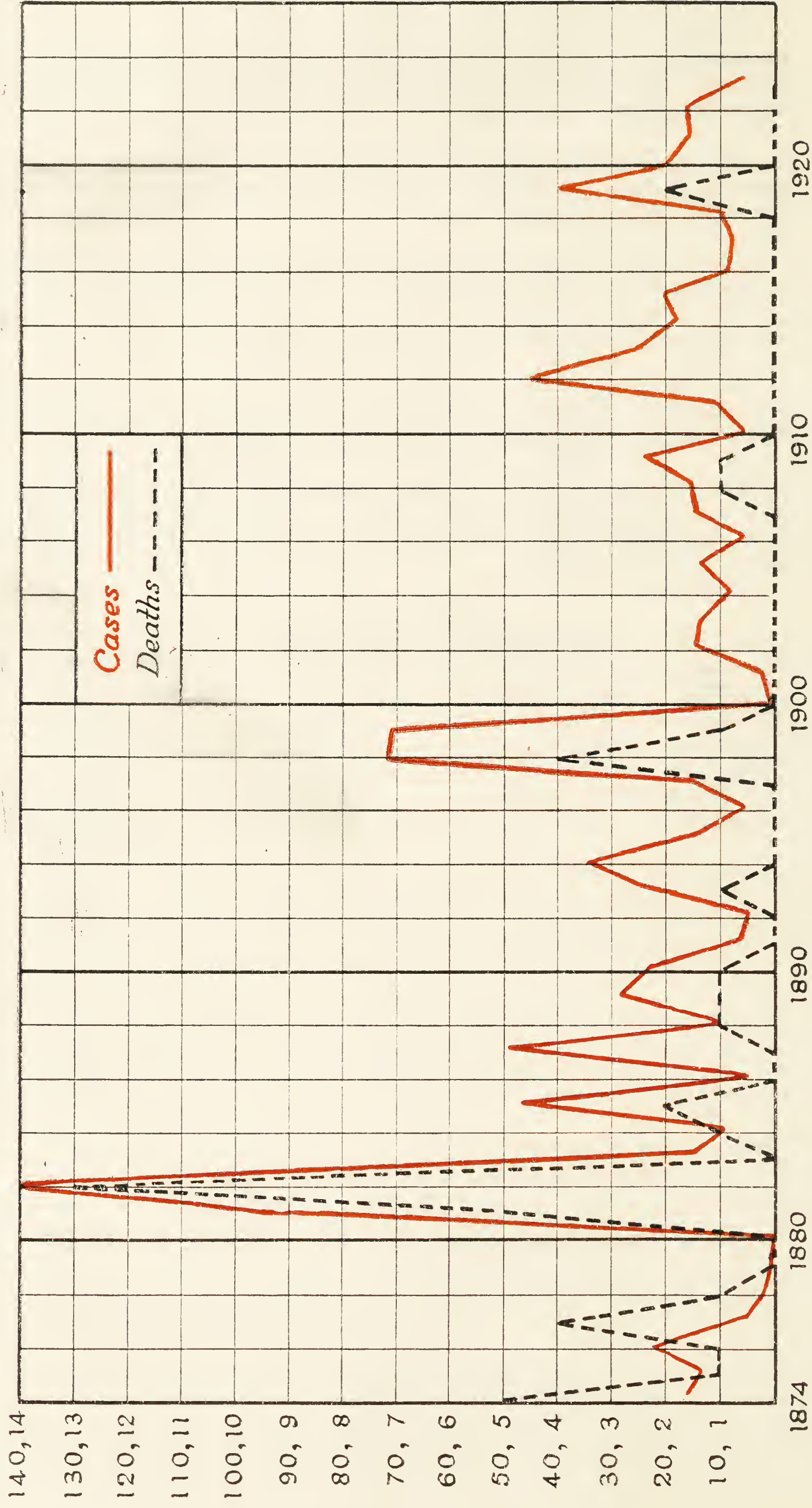
	Scarlet Fever.		General Death Rate.
	Case Mortality	Death Rate.	
1874-1880	20.3	.13	16.2
1881-1890	5.7	.19	16.3
1891-1900	2.4	.05	15.2
1901-1910	1.8	.018	14.4
1911-1920	1.0	.019	14.6
			(1912-1921)



Cases Deaths

Graph I.

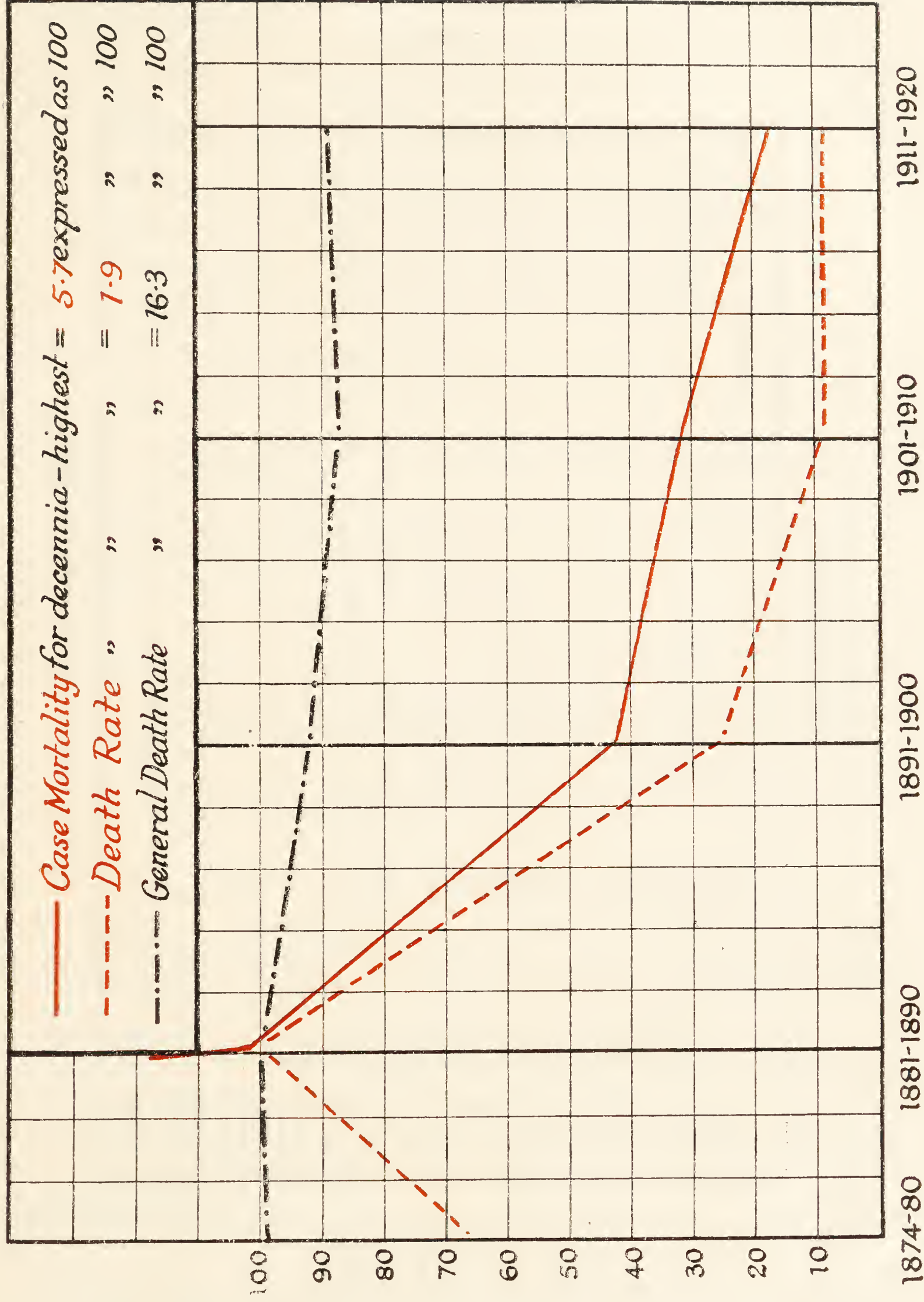
SCARLET FEVER.





Graph II.

SCARLET FEVER.





Tuberculosis.

Age Periods.	NEW CASES.				DEATHS.			
	Respiratory		Non-respiratory		Respiratory		Non-respiratory	
	M.	F.	M.	F.	M.	F.	M.	F.
0 ..								
1 ..								
5 ..	1	2	1					
10 ..	1	1	1					
15 ..	2	1	1		2			
20 ..	1				1	1*		
25 ..	3			1				
35 ..	1							
45 ..	1				2			
55 ..								
65 and up- wards								
Totals ..	10	4	3	1	5	1	0	0

\*This Patient died of Tubercular Meningitis.



## HOSPITALS.

There is no hospital in the district for the isolation of infectious diseases, but, when necessary, cases are removed to the Infectious Diseases Hospital, Cambridge.

One scarlet fever patient was admitted to Hospital during the year.

## HOSPITALS—

*Tuberculosis*: Industrial Colony for Tuberculosis, Papworth.

*Maternity and Children's*: Addenbrooke's Hospital, Cambridge.

*General Hospital*: Addenbrooke's Hospital, Cambridge.

*Fever Hospital*: Infectious Diseases Hospital, Cambridge.

*Small-Pox Hospital*: Cambridge.

*County Mental Hospital*: Fulbourn.

The Linton Union gives an annual subscription of £11 11s. to Addenbrooke's Hospital.

Patients at the Infectious Diseases Hospital and the County Mental Hospital are paid for at weekly rates.

There are no hospitals in the District.

PROFESSIONAL NURSING in the Home is supplied by Voluntary Nursing Associations at Babraham, Balsham, Castle Camps, Horseheath, Linton, Sawston, Weston Colville, Whittlesford. These are each given a subscription of £6 per annum by the Linton Union.

MIDWIVES.—The number registered as practising in the District is six trained and two untrained.

## CLINICS AND TREATMENT CENTRES.

<i>Name :</i>	<i>Situation :</i>	<i>Accommodation :</i>	<i>Provided by :</i>
Maternity and Child Welfare	Linton Sawston .. ..		Voluntary Aid. County Council.
Tuberculosis ..	The County Tuber- culosis Dispensary for consultation.		ditto.
Venereal Diseases	Addenbrooke's Hosp.	Beds for any necessary cases.	ditto.

School Medical Inspection is carried out by the County School Medical Officer.

## LABORATORY WORK.

Five throat swabs were bacteriologically examined for the presence of Diphtheria bacilli during the year, either at the Bacteriological Laboratory, Cambridge, or at the Clinical Research Association, London.

Diphtheria antitoxin is obtained by the medical practitioners when required and charged to the District Council.



## ADOPTIVE ACTS, ETC.

The Public Health Acts Amendment Act, 1890, so far as it is applicable to Rural Districts, is in force.

The Model Regulations of the Ministry of Health with respect to Dairies, Cowsheds, and Milkshops have been adopted and came into force on 1st February, 1923.

Bye-laws with respect to Tents, Vans, Sheds, and similar structures were adopted on 12th August, 1908.

## SANITARY ADMINISTRATION.

Inspections	..	..	..	..	..	..	..	597
Nuisances or defects found	..	..	..	..	..	..	..	94
Nuisances or defects remedied		..	..	..	..	..	..	57
Informal written notices	..	..	..	..	..	..	..	48
Statutory Notices	..	..	..	..	..	..	..	—
Cases of infectious disease removed to Hospital	..	..	..	..	..	..	..	1
Premises disinfected	..	..	..	..	..	..	..	15
Houses repaired	..	..	..	..	..	..	..	14
Samples of water taken for analysis	..	..	..	..	..	..	..	5

Disinfection is carried out by means of fumigation with formalin. Fifteen premises were disinfected during the year. There is no steam disinfecter in the district.

There are thirty-five registered cowkeepers or purveyors of milk.

## FACTORIES AND WORKSHOPS.

Two lists of outworkers were received.

There are nineteen bakehouses in the district. These have been inspected and circular letters were sent out in May and October drawing the attention of occupiers to the cleansing and limewashing required by the Regulations under the F. and W. Act.

Licences have been issued to fifteen slaughter houses. Eight of these that were inspected in former years are in a fairly satisfactory condition. Many of the remainder are of a rural type and of a somewhat crude description. In most of them slaughtering takes place at irregular periods, but the Sanitary Inspector attends as frequently as possible.

There are two knackers' yards, one at Balsham and one at Duxford, to which licences have been granted during the year.



## WATER SUPPLY.

The water supply of the District is from dew ponds, springs, shallow wells and deep wells.

The water bearing chalk strata in the low lying areas approach to within four feet of the surface. On the high ground the chalk is in many areas covered by patches of boulder clay to a depth of from about 45 to 180 feet from the surface. Frequently the water level is not reached for about 120 feet, boring has even been carried to nearly 200 feet before water has been seen.

Since 1883 it has been the practice of the Council to have deep wells bored into the chalk. Except where the boulder clay has to be penetrated these are usually of a depth of about 120 feet and are lined for about 60 feet with four inch wrought iron tubes. By this method a water supply moderately free from surface contamination has been obtained.

Prior to 1923 there were three such wells bored for the Council at Linton, five at Pampisford, eight at Sawston, one at Hinxton, and three at Whittlesford. In 1923 there were three similar wells bored; one at Weston Colville to a depth of 157 feet and lined for 80 feet; one at Duxford to a depth of 105 feet and lined for 40 feet; one at Castle Camps to a depth of about 230 feet. In 1924 one well was bored and lined with wrought iron tubes at Linton.

## PUMPS AND WELLS IN THE DISTRICT.

**BABRAHAM.**—One public pump supplied from a well in the chalk; other wells in the chalk from a depth of 20 to 60 feet.

**BALSHAM.**—Three public deep wells; one 165 feet in the chalk provided with a wheel pump, two draw wells of 182 and 160 feet in the chalk. There are also private wells in the chalk or gravel.

**BARTLOW.**—Private wells from 10 to 60 feet deep.

**CARLTON.**—Public pump supplied from a spring; ponds and wells.

**CASTLE CAMPS.**—Public wheel pump supplied from a deep well bored about 230 feet through boulder clay into the chalk and lined with wrought iron tubes; ponds, springs and other wells.

**DUXFORD.**—Public well in the chalk, 105 feet deep, lined 40 feet with wrought iron tubes; other wells from 7 to 160 feet deep.

**GREAT ABINGTON.**—One pump is used by the public; other wells in the chalk varying from 20 to 240 feet.

**HILDERSHAM.**—Wells in the chalk and gravel varying in depth from 7 to 28 feet.



HINXTON.—Public well bored to a depth of 148 feet into the chalk and lined with iron tubes, the water rising to 27 feet from the surface ; other wells in the chalk from 11 to 70 feet deep.

HORSEHEATH.—Three public pumps supplied from ponds, one public pump supplied from a spring ; private wells.

ICKLETON.—Public well in the chalk ; other wells in chalk or gravel from 7 to 195 feet in depth. There is also a private well bored to a depth of 232 feet in the chalk and lined with wrought iron tubes to a depth of 101 feet, the water rising to about four feet from the surface.

LINTON.—Four public tube wells bored into the chalk, three to a depth of 120 feet and lined for 60 feet with wrought iron tubes ; numerous other wells dug or bored into the chalk from 10 to 146 feet deep.

LITTLE ABINGTON.—Wells in the chalk from 15 to 122 feet deep.

PAMPISFORD.—Five public wells bored to a depth of 120 feet into the chalk and lined with wrought iron tubes to a depth of 60 feet ; other wells dug in the chalk.

SAWSTON.—Eight public wells bored into the chalk for a depth of 120 feet and lined with wrought iron tubes to a depth of 60 feet ; and other wells.

WESTON COLVILLE.—Public well bored 157 feet into the chalk and lined for 80 feet with wrought iron tubes, the water rose to a depth of 97 feet from the surface and is reached by a rising main, 94 feet of  $2\frac{1}{2}$  inch tubes, with a projection of 18 feet of  $1\frac{1}{2}$  inch suction tubes.

In boring this well a hard stratum, probably the so-called Chalk Rock, was encountered at 107 feet, from the difficulty in boring it appeared to be about 5 feet in depth ; the well was continued for another 45 feet. There are other wells, ponds and rainwater tanks.

WEST WICKHAM.—Public wheel pump supplied by a well 129 feet deep, dug through boulder clay into the chalk ; a public pump supplied from a spring ; wells and ponds.

WEST WRATTING.—Public wheel pump supplied by a well 154 feet deep, dug through the boulder clay into chalk ; other wells and ponds.

WHITTLESFORD.—Three public wells bored for 80, 85, and 100 feet into chalk and lined 40 to 50 feet with iron tubes, one pump dug in relation to the Council cottages ; other wells dug in the chalk from 15 to 162 feet deep.



Village	Population.	Depth of Water Level from surface in feet.	Depth of Wells bored or dug.	Public Pumps.
Babraham ..	.. 238	15		1
West Wratting ..	.. 417	146	154	1
Balsham ..	.. 654	159	160, 165, 182	3
Weston Colville ..	.. 381	97	157	1
Carlton ..	.. 254	—		1
West Wickham ..	.. 354	117	129	1
Horseheath ..	.. 369	100		4
Shudy Camps ..	.. 261	119		—
Castle Camps ..	.. 551	198	about 230	2
Bartlow ..	.. 94	—		—
Linton	1,446	35	120	4
Hildersham ..	.. 155	15		—
Great Abington ..	.. 219	17		—
Little Abington ..	.. 194	29		—
Pampisford ..	.. 255	18	120	5
Sawston ..	.. 1,530	8	120	8
Hinxton ..	.. 297	26	148	1
Ickleton ..	.. 543	6		1
Duxford ..	.. 734	9	105	1
Whittlesford ..	.. 980	10	80–100	3

A public well at Balsham has been repaired.

SANITARY INSPECTOR.—Mr. A. Coulter resigned on 26th August, 1925, and Mr. E. G. Breed, High Street, Linton, was appointed on 3rd November, 1925. He holds the certificate of the Royal Sanitary Institute (Manchester, 1924).



HOUSING.

Number of new houses erected during the year :—

(a) Total	..	..	..	..	..	..	..	6
(b) With State Assistance under the Housing Acts, 1919, 1923 or 1924	..	..	..	..	..	..	..	—
(i) By District Council	..	..	..	..	..	..	..	4
(ii) By other bodies or persons	..	..	..	..	..	..	..	—
(c) By private enterprise	..	..	..	..	..	..	..	2

HOUSES BUILT IN 1925.

					ROOMS	
GREAT ABINGTON.—	*Linton By-Road	..	..	W.C.	D.	4
SAWSTON	Shelford Road	..	..		D.	
WEST WRATTING.—	*Near Waddelow Farm	..	..	W.C.	S.D.	4
	* „ „ „	..	..	W.C.	S.D.	4
WHITTLESFORD	Near Memorial Hall	..	..	D.B.		4
	*Duxford Road	..	..	D.B.		4
	* State assisted.					

W.C.—Working Class. S.D.—Semi-detached. D.—Detached. B.—Bungalow.

UNFIT DWELLING HOUSES

I.—INSPECTION.

(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)..	78
(2) Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District Regulations, 1910) .. .. .	78
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation .. .. .	6
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation	36

II.—REMEDY of Defects without service of formal notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers .. .. .	33
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III.—ACTION under Statutory Powers.

A.—Proceedings under Section 28 of the Housing, Town Planning, Etc. Act, 1919.

(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. .. .	—
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- (2) Number of dwelling-houses which were rendered fit after service of formal notices—
- (a) by owners .. .. . —
- (b) by Local Authority in default of owners .. —
- (3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close .. .. . —

*B.—Proceedings under Public Health Acts.*

- (1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied .. —
- (2) Number of dwelling-houses in which defects were remedied after service of formal notices—
- (a) by owners .. .. . —
- (b) by Local Authority in default of owners .. —

*C.—Proceedings under Sections 17 and 18 of the Housing, Town Planning, Etc., Act, 1909.*

- (1) Number of representations made with a view to the making of Closing Orders .. .. . 6
- (2) Number of dwelling-houses in respect of which Closing Orders were made .. .. . \*6
- (3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit .. .. . 2
- (4) Number of dwelling-houses in respect of which Demolition Orders were made .. .. . —
- (5) Number of dwelling-houses demolished in pursuance of Demolition Orders .. .. . —

\* Four unoccupied.











